

Begin

#

648

E-2

USSR/Virology - Human and Animal Viruses.

Abs Jour : Ref Zhur - Biol., No 8, 1956, 33602

Author : Mishkoltsi, D., Tsiki, O., Vender, V., Atragam, Al.,
Veyttsug, N., Vagner, K.

Inst :

Title :

Epidemic of Viral Mosquito Encephalitis of Summer's
End and Autumn, Observed in Tyrga-Muresh in 1955.
(Epidemiya virusnogo komarinogo entsefalita kontsa leta-
oseni, nablyudavshayasya v Tyrgu Mureshe v 1955 roku).

Orig Pub : Rumynsk. med. obozrenie, 1957, I, No 1, 58-62

Abstract : No abstract.

Card 1/1

VENDEROVA, E.

Effect of age and duration of the stay on mortality in creches.
Cesk pediat. 19 no.10:925-930 O '64.

1. Detske oddeleni GUM v Solovce; vedouci MUDr. J. Najsmik.

VENDEROVA, E.; NAJEMNIK, J.

Semi-microdetermination of the specific gravity of urine. *Cesk. pediat.*
17 no.1:63-65 Ja 42.

1. Detske oddeleni OUNZ v Sokolove, prednosta MUDr. Jiri Najemnik.

(URINE chemistry)

VENDEROVA, E.; NAJEMNIK, J.

Morbidity in infants from nurseries and under home care. Cesk.
pediat. 18 no.2:163-167 F '63.

1. Detske oddeleni OUNZ v Sokolove, prednosta MUDr. J. Najemnik.
(PEDIATRICS) (CHILD WELFARE) (MORBIDITY)

VENDEROVA, E.; MIMRA, J.

New hexachlorophene washing emulsion in the prevention of nosocomial Staphylococcus skin infections in newborn infants. Cesk. ped. 20 no.12:1105-1107 D '65.

1. Gynekologicko-porodnické oddelení Obvodního ústavu národního zdraví v Sokolově (vedoucí - MUDr. I. Grossmann) a Protiepidemický odbor, Obvodní hygienicko-epidemiologická stanice v Sokolově (vedoucí - J. Mimra, prom. lek.).

BABIN, P.N.; VENDEROVA, L.K.

Effect of the structure of magnesite on its technological
properties. Trudy Inst. met. i'obog. AN Kazakh. SSR 6:171-
180 '63. (MIHA 16:10)

KANTOR, D.V., dotsent; GRUNFEST, Ya.Z.; VENDROVA, G.M.

Most frequent levels of normal physiological intraocular pressure.
Vest.oft. no.5:18-20 '62. (MIRA 15:12)

1. Glaznoy kabinet 6-y polikliniki 3-y Minskoy ot"edinennoy
klinicheskoy bol'nitsy.

(INTRAOCULAR PRESSURE)

BABIN, P.N.; VENDEROVA, L.K.

Investigating Kurchum deposit talc-magnesite rocks.

Trudy Inst. met. i obog. AN Kazakh. SSR 5:159-174 '62.

(MIRA 15:11)

-(Kurshum region--Magnesite)
(Talc)

8

EABIN, P.N.; VENDEROVA, L.K.; KARLYSHEV, B.N.

Magnesite in the Kimpersay massif of ultrabasic rocks. Izv. AN Kazakh.
SSR. Ser. met., obog. i ogneup no. 1: 59-72 '61. (MIRA 14:6)
(Aktyubinsk Province—Magnesite)

BABIN, P.N.; VENDEROVA, L.K.

~~Study of talc-magnesite rocks from the Kurchum valley. Report~~
no. 2. Trudy Inst. met. i obog. AN Kazakh. SSR 9: 8-19 '64.
(MIRA 17:9)

VENDEROVICH, A. M.

1961

c/1058

Semiconductors and Dielectrics

VENDEROVICH, G.A.; LISTENOV, V.M.

Performance of the Mb-153 phase splitter in the - F. 10000
locomotives. Izv. ONI 11 21:197-150 1966.

(MPS-18:0)

VENDEROVICH, G. A., Cand Tech Sci -- (diss) "Statistical transformation of the number of phases in a one phase-three phase chain." Tomsk, 1960. 15 pp with charts; (Ministry of Higher and Secondary Specialist Education RSFSR, Tomsk Order of Labor Red Banner Polytechnic Inst in S. M. Kirov); 150 copies; price not given; (KL, 26-60, 134)

AUTHOR: Venderovich, G. A., Postgraduate Student SOV/144-58-9-11/18
TITLE: Transformation of a Single-Phase System into a Three-Phase Symmetrical System by Means of a Transformer
(Preobrazovaniye odnofaznoy sistemy v trekhfaznuyu simmetrichnuyu sistemu s pomoshch'yu transformatora)
PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika, 1958, Nr 9, pp 77-83 (USSR)
ABSTRACT: For transforming the number of phases, the author of this paper proposes using a primary transformer winding which is non-symmetrical as regards its number of turns; the magnitude of this asymmetry is determined in each concrete case by the $\cos \varphi$ of the load. As a compensating element a capacitance is connected into one of the phases. The proposed transformer ensures a three-phase symmetry of the currents and voltages for a variable resistance-inductance load. The calculations were made on the basis of a circuit, a sketch of which is shown in Fig 1, p 77. The derived theoretical relations were verified on an experimental model consisting of a 3-core transformer and for one of the phases the number of turns could be regulated.

Card 1/2

SOV/144-58-9-11/18

Transformation of a Single-Phase System into a Three-Phase
Symmetrical System by Means of a Transformer

The experimental data, obtained on connecting a three-phase asynchronous motor to a single-phase supply via the here described transformer, is graphed in Fig 4, p 82. It was found that only in the case of very considerable changes in the load (i.e. relatively rarely) was it necessary to change the number of turns and the capacitance of the regulated phase. Thus, it is possible to apply relatively easily automatic control. The three-phase voltage remains fully symmetrical during load changes, as can be seen from the vector diagram, Fig 56. The here described transformer is suitable for the main circuit of a.c. locomotives. There are 5 figures, 2 tables and 8 references, 5 of which are Soviet, 2 English, 1 German.

ASSOCIATION: Kafedra teoreticheskoy elektrotekhniki, Tomskiy transportnyy institut. (Chair for Theoretical Electrical Engineering, Tomsk Transportation Institute)

SUBMITTED: August 6, 1958

Card 2/2

VENDEROVICH, G.A.

Calculation of the parameters of a static phase number converter
during the starting operation of an electric motor. Izv. vys.
ucheb. zav.; elektromekh. 5 no.2:235-237 '62. (MIRA 15:3)
(Phase converters) (Electric transformers)

VENDEROVICH, G.A.

Calculation of the parameters of a static phase number converter
during the start operation of a motor. Trudy TEIIZHT 35:106-111
'62. (MIRA 16:8)

(Electric current converters) (Electric motors)

1. VENDEROVICH, Ye. I. and YEGOROVA, A. I.
2. USSR (600)
4. Brain
7. New data on the conduction system of the posterior crus of the interior capsule.
Zhur.nevr.i psikh. 52 no. 12, 1952.
9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

VENDEROVICH, Ye.L. zaslushennyy deyatel' nauki, prof. [deceased]

Localization of function and symptoms in the human brain.
Trudy LMI 2:204-207 '55 (MIRA 11:8)

1. Kafedra nervnykh bolezney (zav. prof. Ye.L. Venderovich [deceased]
Pervogo Leningradskogo meditsinskogo instituta imeni akademika
I.P. Pavlova.
(BRAIN--LOCALIZATION OF FUNCTIONS)

MOISEYEVA, N.I., kand.med.nauk

Disorders in the concomitant movements of the eyes in diseases
of the nervous system. Vop.neirooft. 2:105-126 '63.(MIRA 16:8)

1. Iz kafedry nervnykh bolezney 1-go Leningradskogo meditsin-
skogo instituta imeni akademika Pavlova (zav. kafedroy - Ye.L.
Venderovich).

~~————~~ (BRAIN—DISEASES) (EYE—MOVEMENTS)

L 2455-66 EWT(1)/EWA(h)

ACCESSION NR: AP5024039

UR/0057/65/035/009/1610/1616
621.373.413

AUTHOR: Sushkov, A.D.; Vendik, I.B.

TITLE: Influence of a nonuniformity on the properties of a circular resonator

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 9, 1965, 1610-1616

TOPIC TAGS: resonator, waveguide, circular resonator, pulse generation, waveguide nonuniformity, transmission line

ABSTRACT: The authors employ the matrix methods of transmission line theory to discuss the effect of a localized nonuniformity on the resonant frequencies of a circular resonator. The calculations were undertaken because of the possible applications of circular resonators to the production of nanosecond pulses. The resonator is treated as a T section of a transmission line with two of the free ends joined together. The nonuniformity, which need not be small, is described by its reflection matrix and its distance from the junction of the feeder with the circular line. The reflection matrix at the input of the feeder is calculated and this is employed to calculate the resonant frequencies and the stored energy at resonance. The nonuniformity can either increase or decrease the stored energy.

Card 1/2

L 2455-66

ACCESSION NR: AP5024039

and its influence depends on its position; a nonuniformity at a node, for example, has no effect. This behavior is contrasted with the effect of a nonuniformity on the propagation of a traveling wave, where the position makes no difference. The effect of partly closing a particular circular resonator with a rectangular diaphragm on its first three resonant frequencies was calculated and the results were compared with experimental values. The experimental resonator was modeled by two coaxial cylinders of radii 4.3 and 1.7 cm and by two planes normal to the axis of the cylinders and 0.6 cm apart, the resonant frequencies were 5953, 6605, and 7474 Mc/sec. Good agreement was found between the measured and calculated frequency shifts. Orig. art. has: 27 formulas and 4 figures. [15]

ASSOCIATION: Leningradskiy elektrotekhnicheskii institut imeni V.I.Ul'yanova (Lemina) (Leningrad Electrotechnical Institute)

SUBMITTED: 20Jul64

ENCL: 00

SUB CODE: EC, EM

NR REF SOV: 004

OTHER: 004

ATD PRESS: 4/104

BVK

Card 2/2

VENDEROVICH, YE. I.

42745. VENDEROVICH, YE. I. Klassifikatsiya Sostoyaniy Golovnoy Morya i d. Lektsii
Travre Golov' i ill. kazhimmee Licheniya. Trudy In-ta Veyrokhirurgii im. Burdakov, I. I.
1948, s. 365-79.

SO: Letopis' zhurnal'nykh Statey, Vol. 7, 1949

VENDEROVICH, Ye.L.

Fibular sensory defect. Zh. nevropat. psikiat., Moskva 53 no.11:861-865
Nov 1953. (GLML 25:4)

1. Leningrad.

BC

Influence of a concentrated space charge on the electrical insulation of calcite. A. VANDER-
VORCKE and A. VOONROOY (Physikal. Z. Neuchâtel, 1936, 10, 472-480).—The discharge potential of
calcite in a homogeneous field is decreased by pre-
liminary polarization of the crystal when the dis-
charge occurs in the direction of the polarization and
is increased when the directions of polarization and
discharge are opposite. The results are best explained
by Fowler's theory (cf. A., 1933, 687). O. D. S.

ASS-555 METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNDICATE

RECEIVED MAY 1937

RECEIVED MAY 1937

GUSHKOV, A.D.; VANDIK, I.B.

Effect of inhomogeneities on the properties of a ring resonator.
Zhur.tekh.fiz. 35 no.9:1610-1616 S '65.

(MIRA 18:10)

L. Leningradskiy elektrotekhnicheskii institut imeni V.I.
Ul'yanova (Lenina).

Vendik, O.G.

18 июня
(с 10 до 16 часов)

В. К. Муромов
Новый метод определения относительного интегрального
уровня сигнала в антенне

В. М. Талов
К вопросу о дифференциальной антенной антенне

О. Г. Вендик
Система автоматического управления с обратной связью по
сигналу шума

19 июня
(с 16 до 22 часов)

Г. К. Фролов
Фигурное изображение информации сигнала
в антенне (реферат)

А. В. Сидор
Метод измерения коэффициента корреляции сигнала
сигнала в антенне по сигналам антенны

В. С. Косович
В. А. Гусевский
Вопросы теории радиотехники на антеннах, по
антеннам по антеннам, антеннам антенны антенны
антенны антенны антенны антенны

С. К. Косович
Антенны антенны антенны антенны антенны антенны

В. А. Косович
А. В. Косович
Система автоматического управления с обратной связью по
сигналу шума

21 июня
(с 10 до 16 часов)

В. С. Косович
Дифференциальная антенная антенна антенна антенна
антенна антенна антенна антенна

В. С. Косович
Решение антенны антенны антенны антенны антенны

В. В. Косович
О статистическом анализе антенны антенны антенны антенны
антенны антенны антенны антенны антенны антенны

Report submitted for the Centennial Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in. A. S. Popov (VSEK), Moscow,
8-12 June, 1957

81116

S/142/60/000/01/008/022
E140/E463

9.1200

AUTHOR: Vendik, O.G.

TITLE: Synthesis of Linear Radiators with Non-Mechanical Beam Scanning

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1960, Nr 1, pp 77-86 (USSR)

ABSTRACT: This paper was presented at the Jubilee Session of the NTOR i E A.S.Popov Society, Moscow, June 1959.

In the design of antennas with non-mechanical beam scanning, the following parameters are specified: fundamental lobe width, side-lobe level, scanning angle of principal lobe. To shift the direction of maximum radiation in a co-phase linear array, it is necessary to introduce phase shifts between individual radiators or groups of radiators. The purpose of the present article is to determine the minimum required number of groups for a given array for prescribed values of the above parameters. The article also investigates the magnitude of phase shift required between the individual radiators and the distribution of current amplitudes to ensure a given side-lobe level. The method employed in

Card 1/2

81116

S/142/60/000/01/008/022
E140/E463

Synthesis of Linear Radiators with Non-Mechanical Beam Scanning

the article is based upon that of Yen (Ref 3). The basic method is to expand the directional pattern in orthogonal functions of the form sine integral. From an analysis of this expansion, the minimum number of individual radiators for a solution of the problem is found. It is then demonstrated that this minimum number is sufficient but requires very careful selection of the individual radiator directional pattern. With a greater number of radiators more favourable conditions may be obtained. The phase shift between individual radiators does not directly depend on the width of pattern or the scanning angle but only on their ratio. The analysis does not present a proof of the relations obtained for the general case of arbitrary antenna system and neglects the mutual couplings of the radiators. There are 6 figures, 1 table and 9 references, 2 of which are Soviet and 7 English.

SUBMITTED: July 14, 1959

Card 2/2

24226

S/142/61/004/001/005/008
E033/E135

9,1000

AUTHOR:

Vendik, O.G.

TITLE:

Current distribution in an antenna with non-mechanical beam-swinging

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy,
Radiotekhnika, 1961, Vol.4, No.1, pp. 64-76

TEXT:

The object of this article is to obtain the laws which relate the polar diagram and the current distribution in an antenna for non-mechanically swinging the beam through a given angle of nutation. (The term "current in the antenna" in this article means not only the current flowing in the metallic conductor but also the dielectric displacement current and the equivalent surface current which arises at points of discontinuity of the tangential field components). A theorem is proved which establishes the relation between the directional properties of the antenna and the distribution of the current in the antenna for non-mechanical beam-swinging in one plane. The theoretical results are compared with published experimental data. Two well known methods of beam-swinging with a stationary antenna by controlling the current

Card 1/5

24226

Current distribution in an antenna S/142/61/004/001/005/008
E033/E135

distribution are considered: 1) an antenna in the form of separate radiators, the current in each of which is controlled by separate control apparatus, e.g. an antenna consisting of several dielectric rods with a ferrite phase-shifter in the feed circuit of each; 2) an antenna with continuous current distribution, the form of which is changed by the action of controlling fields, e.g. an open-end of a waveguide filled with ferrite. The basic parameters of the polar diagram are: $\Delta\theta$ - the half-power point width of the main beam; θ_k - the angle of non-mechanical swing of the beam; ϵ - the level of the side-lobes. The current distribution in any antenna nutated in one plane may be given as a function of the coordinates $F(x, y)$. This is considered as the sum of several components

$$F(x, y) = \sum_{i=1}^m A_i f_i(x, y) \quad (1)$$

where $f_i(x, y)$ are functions of the coordinates only, and the value of each coefficient A_i depends only on the operation of the control apparatus. The functions $f_i(x, y)$ are linear independent vector functions. The theorem states: If, in an antenna with

Card 2/ 5

24226

Current distribution in an antenna.... S/142/61/004/001/005/008
E033/E135

non-mechanical nutation of the beam in one plane, the main lobe of half-power point width $\Delta\theta$ is to be displaced within the limits of θ_k , then the current distribution in the antenna must contain, at least, n linear independent components, where

$$n = \frac{\theta_k}{\Delta\theta} + 1$$

(5)

This formula is checked against experimental results obtained by D.J. Angelakos and M.M. Korman (Ref.2: Radiation from ferrite-filled apertures, PIRE 1956, V.44, No.10, 1463), by F. Reggia et al. (Ref.1: F. Reggia, E.G. Spencer, K.D. Hatcher, I.E. Toipkins, Ferrod radiator system, Conv. Record IRE, 1956, V.1, 213), and others. The permissibility of representing a smoothly nutating beam as the sum of a finite number of functions is justified and a practical conclusion is drawn; that antenna which has stationary polarisation and phase diagrams during nutation of the beam will require the least number of components to form the polar diagram. The amplitude of the polar diagram and its relation to the current distribution function is investigated. It is concluded that:

Card 3/5

24226

Current distribution in an antenna.... S/142/61/004/001/005/008
E033/E135

1) The greater the ratio $\theta_k/\Delta\theta$, the more complicated the current distribution in the antenna must be. This leads to an increase in the number of separate radiators required, or to a more complicated continuous current-distribution function.

2) The simplest current distribution law will be obtained if the phase and polarisation diagrams are stationary.

The problem of obtaining the optimum system of functions for the current distribution is investigated in the Appendix.
Professor Yu.Ya. Yurov advised in this work.

There are 4 figures and 8 references: 3 Soviet-bloc, 1 German and the following 4 English:

References 1 and 2, as quoted above.

Ref.3: Medved, D.B. An electronic scan using a ferrite aperture Luneberg lens system. IRE Trans. on Microwave Theory and Techniques, 1958, MTT-6, No.1, 101.

Ref.5: Kurtz, Elliott. Systematic errors caused by the scanning of antenna arrays, phase shifter in the branch lines. IRE Trans on Antennas and Propagation, 1956, Ap-4, 619.

Card 4/5

24226

Current distribution in an antenna... S/142/61/004/001/005/008
EO33/E135

ASSOCIATION: Kafedra teoreticheskikh osnov radiotekhniki.
Leningradskogo elektrotekhnicheskogo instituta
im. V.I. Ul'yanova (Lenina)
(Department of Theoretical Principles of Radio
Engineering, Leningrad Electrical Engineering
Institute imeni V.I. Ul'yanov (Lenin)

SUBMITTED: January 18, 1960

Card 5/5

39701

S/142/62/005/002/004/019
E192/E382

9.1610

AUTHOR: Vendik, O.G.

TITLE: Angular accuracy of the antenna with nonmechanical
beam movement

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Radiotekhnika, v. 5, no. 2, 1962, 179 - 188

TEXT: The antenna is in the form of an array of radiators in which the position inaccuracy of the array is primarily dependent on the inaccuracies of the phase-shifters employed and the tolerances in the spacing between the radiators. The phase spread and the coordinates of the radiator can be regarded as statistical quantities so that the problem can be solved by the methods of the probability theory. The inaccuracies of the angular position of the beam are assumed to be independent of the wavelength changes or the mutual impedances between the elements of the array, since these are systematic errors which can be determined by other methods. The directional pattern of the array is described by:

Card (1/4)

Angular accuracy

S/142/62/005/002/004/019
E192/E382

$$F(\varphi) = \sum_{i=-n}^n I_i e^{-j(kd_i \sin \varphi - \psi_i)} \quad (1)$$

where I_i and ψ_i are the amplitude and phase of the currents, respectively,
 d_i is the coordinate of the i-th radiator, and
 k is the phase constant.

By analyzing this formula, it is concluded that the pattern undergoes two types of perturbation: 1) that due to the spread of the current amplitudes and 2) that due to the phase spread of the spacings between the radiators. It is shown, however, that the angular errors caused by the current amplitudes are insignificant and it is sufficient to consider only the phase spread and the spacings between the radiators. A formula for the relative mean square deviation of the main lobe of the directional pattern, as a function of the mean square deviations of the phase and spacing (σ_ψ and σ_d), is derived. This is

Card 2/4

Angular accuracy

S/142/62/005/002/004/019
E192/E382

employed to evaluate the relative mean square deviation σ_η of the main lobe for the following cases: series feed of the radiators; parallel supply of the radiators and the supply through rotor phase-shifters with circular movement. It is found that, other conditions being equal, the error σ_η is lowest for the case of the rotor phase-shifters. The relative error for this case is expressed by:

$$\sigma_\eta = \frac{1}{2} \sqrt{\frac{1}{n} [\sigma_\psi^2 + \pi^2 \sigma_d^2]} \quad (19)$$

where $2n+1$ is the number of the elements in the array. A numerical example for a Chebyshev-type array consisting of 33 elements is given and it is found that $\sigma_\eta = 3.7 \times 10^{-3}$. There are 3 figures and 3 tables.

Card 3/4

Angular accuracy

S/142/62/005/002/004/019
E192/E382

ASSOCIATION:" Kafedra teoreticheskikh osnov radiotekhniki
Leningradskogo elektrotekhnicheskogo in-ta
im. V.I. Ul'yanova (Lenina) (Department of
Radiotechnical Theoretical Principles of
Leningrad Electrotechnical Institute im.
V.I. Ul'yanov (Lenin)

SUBMITTED: June 19, 1961 (initially)
August 3, 1961 (after revision)

Card 4/4

$$p_j - 4/21 - 4 - kx$$

ACCESSION NR: AR 100 000

AUTHOR: Verdick, G. G.

enter: a

CITED SOURCE: Izv. Len. gos. univ. Ser. Estestvozn. i med. nauch. Vol. 47, 1962, 90-100

TOPIC TAGS: Antenna directivity, parabolic antennae

TRANSLATION: The problem is solved of calculating the main quantities

revolution (width of the beam) as functions of some generalized parameter p equals a sum of N terms F , where R is the radius of the reflector, F the focal distance, and d sub 0 is the effective dimension of the radiator with square aperture. Taking into account many approximations, the expression for the distribution of the field is

Card 2/3

VENDIK, O.G.

Determination of the mutual impedance of two antennas
using known radiation patterns in a long-distance zone.

Radiotekhnika 17 no.10:11-20 0 '62. (MIRA 15:9)

(Antennas (Electronics))

(Microwaves)

(Radio)

ACCESSION NR: AR4028217

S/0274/64/000/002/A046/A046

SOURCE: RZh. Radiotekhnika i elektrosvyaz', Abs. 2A294

AUTHOR: Vendik, O. G.

TITLE: Allowance for phase errors produced in a parabolic antenna by defocusing of the dipole

CITED SOURCE: Izv. Leningr. elektrotekhn. in-ta, vy*p. 48, 1963, 81-89

TOPIC TAGS: parabolic antenna, dipole defocusing, phase error, antenna efficiency, beam scattering antenna, axial defocusing, transverse defocusing, defocusing angle

TRANSLATION: The influence of phase errors (due to the displacement of the dipole away from the focus) on antenna efficiency is calculated for parabolic antennas with beam scanning, using an approxi-

Card 1/2

ACCESSION NR: AR4028217

mate method. Two cases are considered: displacement of the dipole along the mirror axis, and displacement perpendicular to the axis. Simple expressions are obtained for the determination of the maximum angle of deviation of the dipole from the focus. For antennas with short focal distance, the maximum angle is given by the expression $\alpha_m \leq 2\lambda F^2/R^3$, where λ is the working wavelength and F and R are the focal distance and the radius of the mirror. A comparison of the calculated data with the results obtained with an electronic computer shows that the approximate method is suitable for engineering calculations. 7 illustrations. Bibliography, 4 titles. B. P.

DATE ACQ: 30Mar64

SUB CODE: GE, SD

ENCL: 00

Card 2/2

en/asn-1/1997 FI-6/FI-6.1

NR

1. *Chlorophyll a* (Chl *a*)

0-11, 0-12, 0-13, 0-14, 0-15, 0-16, 0-17, 0-18, 0-19, 0-20, 0-21, 0-22, 0-23, 0-24, 0-25, 0-26, 0-27, 0-28, 0-29, 0-30, 0-31, 0-32, 0-33, 0-34, 0-35, 0-36, 0-37, 0-38, 0-39, 0-40, 0-41, 0-42, 0-43, 0-44, 0-45, 0-46, 0-47, 0-48, 0-49, 0-50, 0-51, 0-52, 0-53, 0-54, 0-55, 0-56, 0-57, 0-58, 0-59, 0-60, 0-61, 0-62, 0-63, 0-64, 0-65, 0-66, 0-67, 0-68, 0-69, 0-70, 0-71, 0-72, 0-73, 0-74, 0-75, 0-76, 0-77, 0-78, 0-79, 0-80, 0-81, 0-82, 0-83, 0-84, 0-85, 0-86, 0-87, 0-88, 0-89, 0-90, 0-91, 0-92, 0-93, 0-94, 0-95, 0-96, 0-97, 0-98, 0-99, 0-100, 0-101, 0-102, 0-103, 0-104, 0-105, 0-106, 0-107, 0-108, 0-109, 0-110, 0-111, 0-112, 0-113, 0-114, 0-115, 0-116, 0-117, 0-118, 0-119, 0-120, 0-121, 0-122, 0-123, 0-124, 0-125, 0-126, 0-127, 0-128, 0-129, 0-130, 0-131, 0-132, 0-133, 0-134, 0-135, 0-136, 0-137, 0-138, 0-139, 0-140, 0-141, 0-142, 0-143, 0-144, 0-145, 0-146, 0-147, 0-148, 0-149, 0-150, 0-151, 0-152, 0-153, 0-154, 0-155, 0-156, 0-157, 0-158, 0-159, 0-160, 0-161, 0-162, 0-163, 0-164, 0-165, 0-166, 0-167, 0-168, 0-169, 0-170, 0-171, 0-172, 0-173, 0-174, 0-175, 0-176, 0-177, 0-178, 0-179, 0-180, 0-181, 0-182, 0-183, 0-184, 0-185, 0-186, 0-187, 0-188, 0-189, 0-190, 0-191, 0-192, 0-193, 0-194, 0-195, 0-196, 0-197, 0-198, 0-199, 0-200, 0-201, 0-202, 0-203, 0-204, 0-205, 0-206, 0-207, 0-208, 0-209, 0-210, 0-211, 0-212, 0-213, 0-214, 0-215, 0-216, 0-217, 0-218, 0-219, 0-220, 0-221, 0-222, 0-223, 0-224, 0-225, 0-226, 0-227, 0-228, 0-229, 0-230, 0-231, 0-232, 0-233, 0-234, 0-235, 0-236, 0-237, 0-238, 0-239, 0-240, 0-241, 0-242, 0-243, 0-244, 0-245, 0-246, 0-247, 0-248, 0-249, 0-250, 0-251, 0-252, 0-253, 0-254, 0-255, 0-256, 0-257, 0-258, 0-259, 0-260, 0-261, 0-262, 0-263, 0-264, 0-265, 0-266, 0-267, 0-268, 0-269, 0-270, 0-271, 0-272, 0-273, 0-274, 0-275, 0-276, 0-277, 0-278, 0-279, 0-280, 0-281, 0-282, 0-283, 0-284, 0-285, 0-286, 0-287, 0-288, 0-289, 0-290, 0-291, 0-292, 0-293, 0-294, 0-295, 0-296, 0-297, 0-298, 0-299, 0-300, 0-301, 0-302, 0-303, 0-304, 0-305, 0-306, 0-307, 0-308, 0-309, 0-310, 0-311, 0-312, 0-313, 0-314, 0-315, 0-316, 0-317, 0-318, 0-319, 0-320, 0-321, 0-322, 0-323, 0-324, 0-325, 0-326, 0-327, 0-328, 0-329, 0-330, 0-331, 0-332, 0-333, 0-334, 0-335, 0-336, 0-337, 0-338, 0-339, 0-340, 0-341, 0-342, 0-343, 0-344, 0-345, 0-346, 0-347, 0-348, 0-349, 0-350, 0-351, 0-352, 0-353, 0-354, 0-355, 0-356, 0-357, 0-358, 0-359, 0-360, 0-361, 0-362, 0-363, 0-364, 0-365, 0-366, 0-367, 0-368, 0-369, 0-370, 0-371, 0-372, 0-373, 0-374, 0-375, 0-376, 0-377, 0-378, 0-379, 0-380, 0-381, 0-382, 0-383, 0-384, 0-385, 0-386, 0-387, 0-388, 0-389, 0-390, 0-391, 0-392, 0-393, 0-394, 0-395, 0-396, 0-397, 0-398, 0-399, 0-400, 0-401, 0-402, 0-403, 0-404, 0-405, 0-406, 0-407, 0-408, 0-409, 0-410, 0-411, 0-412, 0-413, 0-414, 0-415, 0-416, 0-417, 0-418, 0-419, 0-420, 0-421, 0-422, 0-423, 0-424, 0-425, 0-426, 0-427, 0-428, 0-429, 0-430, 0-431, 0-432, 0-433, 0-434, 0-435, 0-436, 0-437, 0-438, 0-439, 0-440, 0-441, 0-442, 0-443, 0-444, 0-445, 0-446, 0-447, 0-448, 0-449, 0-450, 0-451, 0-452, 0-453, 0-454, 0-455, 0-456, 0-457, 0-458, 0-459, 0-460, 0-461, 0-462, 0-463, 0-464, 0-465, 0-466, 0-467, 0-468, 0-469, 0-470, 0-471, 0-472, 0-473, 0-474, 0-475, 0-476, 0-477, 0-478, 0-479, 0-480, 0-481, 0-482, 0-483, 0-484, 0-485, 0-486, 0-487, 0-488, 0-489, 0-490, 0-491, 0-492, 0-493, 0-494, 0-495, 0-496, 0-497, 0-498, 0-499, 0-500, 0-501, 0-502, 0-503, 0-504, 0-505, 0-506, 0-507, 0-508, 0-509, 0-510, 0-511, 0-512, 0-513, 0-514, 0-515, 0-516, 0-517, 0-518, 0-519, 0-520, 0-521, 0-522, 0-523, 0-524, 0-525, 0-526, 0-527, 0-528, 0-529, 0-530, 0-531, 0-532, 0-533, 0-534, 0-535, 0-536, 0-537, 0-538, 0-539, 0-540, 0-541, 0-542, 0-543, 0-544, 0-545, 0-546, 0-547, 0-548, 0-549, 0-550, 0-551, 0-552, 0-553, 0-554, 0-555, 0-556, 0-557, 0-558, 0-559, 0-560, 0-561, 0-562, 0-563, 0-564, 0-565, 0-566, 0-567, 0-568, 0-569, 0-570, 0-571, 0-572, 0-573, 0-574, 0-575, 0-576, 0-577, 0-578, 0-579, 0-580, 0-581, 0-582, 0-583, 0-584, 0-585, 0-586, 0-587, 0-588, 0-589, 0-590, 0-591, 0-592, 0-593, 0-594, 0-595, 0-596, 0-597, 0-598, 0-599, 0-600, 0-601, 0-602, 0-603, 0-604, 0-605, 0-606, 0-607, 0-60

1970-71

... ..
... .. evaluation of the beam displacement of an antenna array

solg. 13. Patentechnik: Elektrolyse, ...

TOPIC TAGS: antenna-beam pointing error, antenna-array analysis, multielement antenna array, root-mean-square value

ABSTRACT: A general expression for the effect of random current excitation on the radiation pattern of a multi-element antenna array has been developed in which the phase distribution of the elements is assumed to be Gaussian. The radiation pattern is shown to be a function of the number of elements, the standard deviation of the phase distribution, and the standard deviation of the current distribution. The radiation pattern is also shown to be a function of the standard deviation of the current distribution.

gain in a given direction. The distance between two portions of the loop on the

1000000
ACCESSION NO: AP1000000

sides of the pointing axis. Two special quantities are introduced which characterize individual radiation elements and which are determined by amplitude and phase radiation patterns. It is pointed out that the phase radiation patterns and phase radiation patterns. It is pointed out that the phase radiation patterns and phase radiation patterns.

Orig. art. has: 1000000

ASSOCIATION: Leningradskiy elektrotekhnicheskii institut im. V. I. Ul'yanova
(Leningrad Electrotechnical Institute)

NUMBER: 0000000

DATE ACQ: 02AUG 61

ENCL: 00

1000000

1000000

1000000

*Card 2/2

VENDIK, Orest Genrikhovich; MASHAROVA, V.G., red.

[Electronically scanned antennas; an introduction to
the theory] Antenny s nemechanicheskim dvizheniem luch;
vvedenie v teoriyu. Moskva, Sovetskoe radio, 1955. 359 p.
(MIRA 13:7)

L 25929-66 EWT(1)/EWA(h) IJP(c) GO

ACC NR: AP6015632

SOURCE CODE: UR/0413/66/C00/009/0038/0038

INVENTOR: Vendik, O. G.

ORG: none

TITLE: Resonance switch with ferrite rod. Class 21, No. 181160

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 38

TOPIC TAGS: waveguide element, ferrite switch

ABSTRACT: The tuned switch shown in the figure together with a ferrite rod and two waveguides attached to apertures as shown form a resonant cavity. As a result of

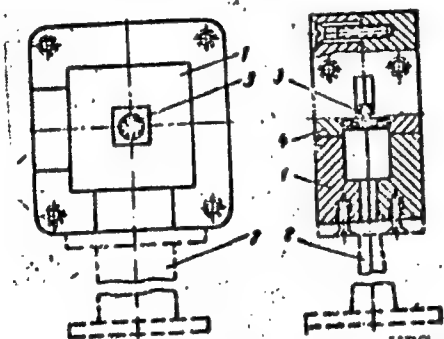


Fig. 1. Tuned switch

1 - resonant cavity; 2 - waveguide;
3 - ferrite rod; 4 - magnetic circuit.

Card 1/2

UDC: 621.372.837.3

L 25939-66

ACC NR: AP6015632

ferrite magnetization, the TE_{120} mode is excited. This allows energy to pass through the switch without losses. Orig. art. has: 1 figure. [BD]

SUB CODE: 09/ SUBM DATE: 24Feb56/ ATD PRESS: 4256

I. 25928-66 ENT(1)/T WR

ACC NR: AM5018509

Monograph

UR/ 59/

54

E+1

Vandik, Orest Genrikhovich

Antennas with nonmechanical motion of the beam; introduction to the theory (Antenny s nemekhanicheskim dvizheniyem луча; vvedeniye v teoriyu) Moscow, Izd-vo "Sovetskoye radio", 1965. 359 p. illus., biblio. 5600 copies printed.

TOPIC TAGS: antenna engineering, antenna array, nonmechanical motion antenna travel, antenna radiation pattern, beam modulation, array beam switching

PURPOSE AND COVERAGE: This book is intended for scientific and technical personnel and aspirants and students in schools of higher education concerned with the study and development of antenna devices for modern electronic systems. The book discusses the shaping and control of the radiation pattern of radiation systems forming an antenna with a nonmechanical motion of the beam. The properties of such systems are described and recommendations are given with respect to design. The author thanks Yu. Ya. Yurov, Chairman of the Department of the Theoretical Bases of Electrical Engineering at the Leningrad Electrotechnical Institute imeni V.I. Ul'yanov-Lenin, and R.I. Kirper, I.G. Mironenko, V.A. Stepanov, Yu.V. Yegorov

Card 1/4

L 25928-66

ACC NR: AM5018509

and Ye. S. Sablin, Staff Members of the Department, on whose work the monograph is based, and also Yu. V. Petrun'kin, M. B. Zakson, C. M. Mesropov, and M. Ye. Starik for their advice.

TABLE OF CONTENTS:

Foreword -- 3

Introduction -- 8

Ch. I. Special features of antennas with nonmechanical motion of the beam -- 11

Introduction -- 11

1. On the structure of antennas with nonmechanical motion of the beam -- 12

2. Classification of antennas with nonmechanical motion of the beam -- 17

3. Transients in the electrical motion of the antenna beam. Quasi-static operating conditions -- 30

4. Antenna noise characteristics -- 38

Ch. II. Properties of radiator systems -- 46

Card 2/4

L 25928-66

ACC NR: AM5018509

0

- Introduction -- 46
- 5. Antenna radiation pattern -- 47
- 6. Individual radiator -- 59
- 7. Intercoupling of individual radiators -- 67
- 8. Quantitative evaluation of the intercoupling between weak directivity radiators -- 87
- 9. Maximal directive gain of a radiator system -- 101
- 10. Evaluation of a side lobe radiation and directive gain in other than optimal phase-amplitude distribution -- 110
- 11. Phase radiation pattern properties of a radiator system ensuring a maximal directive gain -- 122
- 12. Statistical evaluation of the beam shift in a radiator system -129
- Ch. III. Optimal radiator systems with nonmechanical beam motion in one plane -- 145
- 13. Radiator array -- 146
- 14. Synthesis of radiator array with beam motion -- 162
- 15. Array with a minimum of control devices, Matrix circuits -- 179
- 16. Some properties of shaping multiterminal networks. Theoretical limitations with regard to the radiation patterns of multibeam antennas -- 198
- 17. Arbitrary radiation system with the beam motion in one plane - 203

Card 3/4

L 25928-66

ACC NR: AM5018509

2

Ch. IV. Optimal systems with two-dimensional beam motion -- 216

18. Minimal number of elements in two-dimensional beam motion antennas -- 217

19. Planar radiator arrays with spatial beam motion -- 223

20. Irregular spatial distribution of radiators in a plane -- 235

Ch. V. Distortion of the radiation pattern in nonmechanical beam motion antennas -- 256

21. Antenna beam position with a certain phase-amplitude current distribution in a planar radiator array -- 260

22. Evaluation of the basic angular errors of radiator arrays - 269

23. Evaluation of the side-lobe level of planar radiator arrays - 281

24. Effect of radiator intercoupling on the shape of the radiation-pattern system -- 290

25. Effect of radiator intercoupling on the directive and antenna gains of a system -- 298

Ch. VI. Various methods of signal processing in antenna systems - 324

~~26. Linear signal processing. Variable parameter antennas -- 325~~

27. Continuous and discrete antenna beam motions -- 333

28. Logical and nonlinear signal processing -- 340

Bibliography -- 352

SUB CODE: 17/ SUBM DATE: 05Apr65/ ORIG ART: 039/ OTH REF: 096

Card 4/4 FW

L 41650-66 EWT(1) SCTB DD
ACC NR1 AP6031120

SOURCE CODE: UR/0217/66/011/002/0299/0305

AUTHOR: Rubin, A. B.; Fokht, A. S.; Venediktov, P. S.

ORG: Faculty of Biology and Soil Science, Moscow State University im. M. V. Lomonosov (Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta)

TITLE: Investigation of the decay kinetics of the afterglow of photosynthesizing organisms

SOURCE: Biofizika, v. 11, no. 2, 1966, 299-305

TOPIC TAGS: photosynthesis, light biologic effect, plant chemistry, plant metabolism, chemiluminescence

ABSTRACT: > It has been established that the delayed luminescence of photosynthesizing organisms which is observed after the cessation of light excitation is chemiluminescence, occurring during the recombination of intermediate products with pigment molecules in the course of the reverse reactions of photosynthesis. Still unclear in many respects, however, is the relationship between the kinetics of the afterglow and the rate of one photosynthesis reaction or another, particularly in the late stages of the decay of the chemiluminescence. The purpose of the present article is to study the decay kinetics of the protracted afterglow of the leaves of green plants and a suspension of green algae under various conditions of light excitation in order to determine more precisely

Card 1/2

0918

2343

L 41650-66

ACC NR: AP6031120

the relation between the reactions of photosynthesis and the chemiluminescence of photosynthesizing organisms. Green leaves of kidney- and horse beans and a suspension of *Scenedesmus* algae were used. Used to register the light of the chemiluminescence was an FEU-42 photo-multiplier with an end-window antimony-caesium photocathode, functioning under photon-counter operation conditions. The postluminescence decay curve of green leaves was found to consist of at least three components. The first component decays monotonically; the intensity of the second and third components passes the peak during the process of variation with time. The third component, which was discovered by the authors, is produced during excitation by light with wave-lengths greater than 700 millimicrons. The individual components vary in their sensitivity to the action of photosynthesis inhibitors, with the third component the most sensitive and the first component the least sensitive. The authors suggest a mathematical model to illustrate the peculiarities found in the kinetics of the chemiluminescence of photosynthesizing organisms. Orig. art. has: 4 figures and 7 formulas. [JPRS: 36,932]

SUB CODE: 06 / SUBM DATE: 11Jun65 / ORIG REF: 005 / OTH REF: 006

Card 2/3 MT

SAMOYLOVICH, V.G.; VENDILLO, V.P.; FILIPPOV, Yu.V.

Electrosynthesis of ozone. Part 5: Synthesis of ozone in a
flow under reduced pressures. Zhur.fiz.khim. 36 no.5:989-992
My '62. (MIRA 15:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Ozone)

VENDILLO, V.P.

First All-Union Conference on Ozone. Zhur. fiz. khim. 34
no. 11:2619-2620 N 160. (MIRA 14:1)
(Ozone---Congresses).

FILIPPOV, Yu.V.; VENDILLO, V.P.

Electrosynthesis of ozone. Part 2: Synthesis of ozone from oxygen-argon
- mixtures. Zhur. fiz. khim. 35 no.3:624-628 Mr '61. (MIRA 14:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Ozon) (Argon)

VENDILLO, V.P.; YEMEL'YANOV, Yu.M.; FILIPPOV, Yu.V.

Laboratory apparatus for producing ozone. Zav.lab. no.11:1401-1402
'59, (MIRA 13:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Ozone)

05840

SOV/76-33-10-38/45

5(4)

AUTHORS: Filippov, Yu. V., Vendillo, V. P.

TITLE: Electrical Theory of Ozonizers. VI. Effect of the Length of the Discharge Gap on the Electrical Characteristics of Ozonizers

PERIODICAL: Zhurnal fizicheskoy khimii. 1959. Vol 33, Nr 10, pp 2358 - 2364 (USSR)

ABSTRACT: The electrical theory of ozonizers allows for an explanation of some rules governing the variation in the electrical characteristics of ozonizers in dependence on the size of the discharge gap. The authors made investigations by means of ozonizers (Fig 1) with discharge gaps ranging from 0.5 to 4.0 mm (Table: geometrical dimensions of these ozonizers). The apparatus used has already been described (Ref 2). The volt-ampere characteristics of the ozonizers (Fig 1) indicate that the length of the discharge gap has different effects on the characteristics at potentials above and below the critical value. At potentials below the critical value, the slope of the volt-ampere characteristic varies, while above the critical potential it is shifted along the potential ordinate in connection with a variation in the discharge potential. The discharge potential

Card 1/2

Electrical Theory of Ozonizers. VI. Effect of the Length of the Discharge Gap on the Electrical Characteristics of Ozonizers 05840 SOV/76-33-10-38/45

of currents of almost critical potential (spark-over potential) is a linear function of the discharge gap. This indicates that Paschen's law is satisfied here. Equations are then deduced for the dependence of the active ozonizer capacity on the length of the discharge gap (at constant potential and amperage). When the discharge gap extends, the active ozonizer capacity passes through a maximum (at constant potential) the position of which is in principle determined by the ozonizer potential. At constant amperage, the active capacity has no extreme values and rises uniformly with an extension of the discharge gap. There are 6 figures, 1 table, and 5 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 3. 1958

Card 2/2

FILIPPOV, Yu.V.; VENDILLO, V.P.

Electrosynthesis of ozone. Part 7. Zhur. fiz. khim. 36 no.9:
1987-1992 S '62. (MIRA 17:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

VENDILLO, V.P.; FILIPPOV, Yu.V.

Electrical theory of ozonizers. Part 10. Zhur. fiz. Khim. 36
no.9:2058-2061 S '62. (MIRA 17:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

S/076/60/034/05/37/032
B010/B003

AUTHORS: Vendillo, V. P., Yemel'yanov, Yu. M., Filippov, Yu. V.

TITLE: Calculation of Laboratory Ozonizers

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 5,
pp. 1145-1147

TEXT: The electrical theory of ozonizers (Ref. 3) and experimental results on the kinetics of the ozone synthesis obtained in the laboratoriya kataliza i gazovoy elektrokhimii MGU (Laboratory of Catalysis and Gas Electrochemistry of MSU) permit the calculation of ozonizers having the necessary capacity for a certain concentration of ozone. The calculation method described is suitable for any ozonizer. Proceeding from the curves of dependence (Fig. 1) for the concentration of ozone on the factor u/v (u = capacity of the ozonizer, v = consumption of gas) the equations for the calculation of ozonizers are derived. The calculation method is illustrated by an example. It is recommended to use a working voltage of 8-9 kv. For feeding the ozonizer, machine generators

Card 1/2

Calculation of Laboratory Ozonizers

3/076/60/034/05/37/038
B010/B003

or vacuum-tube generators of different types may be used (3T-2A (ZG-2A),
3T-10 (ZG-10), 3T-11 (ZG-11), and others) along with the corresponding
amplifiers (Y-300 (U-300), Y-500 (U-500), Y-600 (U-600) and Y-5 (TU-5)).
In order to raise the voltage (to 8-9 kv), transformers of the types
OM-10 (OM-10), OM-0.5/10 (OM-0.5/10) and OS-5/10 (OS-5/10) may be
used. The voltage may be regulated by laboratory autotransformers of the
types LATP-1 (LATR-1) and LATP-2 (LATR-2). The transformer operation
may be controlled by means of kilovoltmeters of the types C-96 (S-26) and
BKC-7S (VKS-7b), voltage dividers of the types AWE-1 (DNYe-1) and
AWE-2 (DNYe-2), or by means of milliammeters with rectifiers (of the
types LS-312 (Ts-312) and LS-41 (Ts-41) and others). There are 2 figures and
4 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: September 30, 1959

Card 2/2

S/076/60/034/011/024/024
B004/B064

AUTHOR: Vendillo, V. P.

TITLE: First All-Union Conference on Ozone

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 11,
pp. 2619-2620

TEXT: The Pervaya vsesoyuznaya konferentsiya po ozonu (First All-Union Conference on Ozone) was held in Moscow on May 10-15, 1960. It was convened by the Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya SSSR (Ministry of Higher and Secondary Special Education of the USSR) and the khimicheskii fakul'tet Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Chemistry Division of Moscow State University imeni M. V. Lomonosov). The Conference was attended by 250 persons from Moscow, Leningrad, Kiyev, Khar'kov, Dneprodzerzhinsk, Rubezhnyy, Gor'kiy, Chelyabinsk, Omsk, Baku, Makeyevka, Lugansk, Stalino, Tashkent, Ryazan', and other cities. 66 reports were delivered in four sections: 1) "Electrosynthesis of Ozone"; 2) "Study of Various Methods

Card 1/4

First All-Union Conference on Ozone

S/076/60/034/011/024/024
B004/B064

for the Production of Ozone"; 3) "Water Treatment"; and 4) "Chemical Reactions, Properties, and Use of Ozone". At the Plenary Session opened by Professor N. I. Kobozev, reports were delivered by: Yu. V. Filippov on "Synthesis of Ozone in Electric Discharges"; I. A. Khvostikov, "Ozone in the Earth's Atmosphere"; and N. A. Matveyev, "Modern Technology and Apparatus in the Industrial Production of Ozone". 22 reports were held in the first section: Yu. V. Filippov, Yu. M. Yemel'yanov, V. P. Vendillo, V. G. Samoylovich, Yu. N. Zhitnev, and others spoke about "The Electrical Theory of Ozonizers". Reports by V. P. Vendillo, I. A. Semiokhin, Yu. N. Zhitnev, and V. G. Vorenkov dealt with the kinetics of chemical reactions in ozonizers. V. P. Vendillo, B. M. Yemel'yanov, G. P. Zhitneva et al. reported on the calculation of ozone plants and automatic ozone analysis by measuring the change in voltage of a corona discharge. Furthermore, the following reports are mentioned: N. A. Matveyev, "Thermal Processes in Discharge and Their Consideration in Designing Industrial Ozonizers", and jointly with S. F. Beschastnov, "Method and Apparatus for the Ozonization of Humid (non-dried) Air". V. P. Bykov, "Technological Stability and Ozone Losses in Industrial Plants". In the second section,

Card 2/4

First All-Union Conference on Ozone

S/076/60/034/011/024/024
B004/B064

reports were delivered by E. V. Kasatkin, A. A. Rakov, R. I. Kaganovich, Yu. A. Mazitov, Ye. N. Yeregin, N. I. Kobozev, L. I. Nekrasov, I. I. Skorokhodov, N. A. Buneyev, and S. Ye. Pshezhetskiy. 26 reports were held in the fourth section, including those by S. Ye. Pshezhetskiy, Ye. N. Pitskhelauri, V. P. Lebedev, G. I. Yemel'yanova, I. A. Kazarnovskiy, S. I. Panko, V. V. Korshak, G. M. Panchenkov, L. A. Lovchev, K. A. Kleymenov, Ye. T. Denisov, and V. G. Voronkov. The third section was of special interest, for T. B. Bogdanov, Yu. A. Bardin, T. A. Dmitriyeva, L. A. Kul'skiy, I. I. Rozhnyatovskiy, and M. A. Popov dealt with topical problems of industrial water purification, thus confirming the advantage of ozone as compared to chlorine. In their resolution, the delegates stressed the need for more extensive research, and recommended the establishment of special laboratories for the study of the synthesis, industrial production, and use of ozone, as well as of special design offices for the design of industrial ozone installations. The Moskovskoye otdeleniye VKhO im. Mendeleyeva (Moscow Division of the All-Union Chemical Society imeni Mendeleyev) was asked to establish a "Komissiya po ozonu" (Commission on Ozone) as a center of scientific information.

Card 3/4

First All-Union Conference on Ozone

S/076/60/034/011/024/024
B004/B064

The Conference is intended to be convened every 2-3 years.

Card 4/4

S/076/61/035/003/015/023
B121/B206

11.11.20

AUTHORS:

Filippov, Yu. V. and Vendillo. V. P.

TITLE:

Electrosynthesis of ozone. II. Synthesis of ozone from oxygen-argon mixtures

PERIODICAL:

Zhurnal fizicheskoy khimii, v. 35, no. 3, 1961, 624-628

TEXT: The kinetics of the synthesis of ozone from oxygen-argon mixtures has been studied for a wide range of compositions. Experiments were conducted with an apparatus described already previously (Ref. 1: V. P. Vendillo, Yu. M. Yemel'yanov, Yu. V. Filippov, Zavodsk. Laboratoriya, no. 11, 1401, 1959). The synthesis of ozone was made in a glass ozonizer with a-c of 1250 cps and a constant voltage of 8 kv. The flow rate of the reaction gas through the ozonizer was varied between 10-200 l/hr. The analysis of the reaction products for ozone was made iodometrically. Mixtures of the following argon content were used for the synthesis of ozone: 4, 9.5, ~~18.2~~ 37, 48, 62. 70, 80, and 90% by volume of A. It was established that the equilibrium concentration of ozone decreases linearly with an increase of the argon content in the mixtures, a reaction of first order existing therefore. For the

Card 1/2

S/076/61/035/003/015/023
B121/B206

Electrosynthesis of ...

equilibrium concentration x_{eq} of the ozone, the equation $x_{eq} = \frac{a k_0}{k_0 + k_1}$ (2)

holds (a = initial concentration of oxygen in the mixture; k_0 = constant of formation of ozone; k_1 = constant of decomposition of ozone). The constants of decomposition and formation of ozone increase with rising argon content of the reaction mixtures, while the ratio $k_0/(k_0+k_1)$ is independent of the argon content of the mixture and equals 0.0506. This increase of the kinetic constants with an increase of the argon content is explained by the uneven energy distribution of the electric discharge among the components of the mixture. In the formation and decomposition reactions of the ozone, argon remains inactive, since the degree of conversion of oxygen to ozone is independent of the composition of the mixture. S. S. Vasil'yev, N. I. Kobozev, and Ye. N. Yereimin are mentioned. There are 3 figures, 1 table, and 5 Soviet-bloc references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 9, 1959

Card 2/2

37629

S/076/62/036/005/004/013
B101/3110

// 1120

AUTHORS: Samoylovich, V. G., Vendillo, V. P., and Filippov, Yu. V.

TITLE: Electrosynthesis of ozone. V. Synthesis of ozone in a flow under reduced pressure

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 5, 1962, 989 - 992

TEXT: To clarify the kinetics of ozone formation, the synthesis of ozone was studied at reduced pressures in a device described earlier (Zavodsk. laboratoriya, 25, 1401, 1959; Zh. fiz. khimii, 33, 2358, 1959). Three ozonizers, length 250 mm, diameter 35 mm, discharge space 0.5 (1); 2.0 (2), and 4.0 mm (3) were used, the amperage in ozonizers 1 and 2 being 44.4 ma and in ozonizer 3 being 30 ma, the electrodes with water at 22.5°C, frequency 1250 cps, flow rate of oxygen $5 \leq V \leq 500$ liters/hr, pressure 160 - 780 mm Hg. At falling pressure, the curves for O_3 yield (% by volume) versus u/V showed increasingly distinct maxima (Fig. 1). It is discussed whether these maxima are caused (a) by decomposition of ozone before the ozonizer on counter-current diffusion of ozone, or (b) by decomposition of ozone after the ozonizer. The case (a) is possible since

Card 1/2

S/076/62/036/005/004/013
B101/B110

Electrosynthesis of ozone...

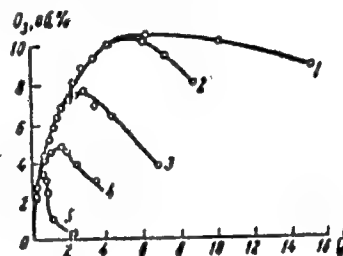
$PV_{\max} = \text{const.}$ has been found experimentally. For the case (b), $PV_{\max} = \text{const.}$ has also been found on the basis of the equation $dx/dt = k_1'x$ ($x = O_3$ concentration, $t = \text{time}$, k_1' = decomposition constant of O_3 after the ozonizer). It is assumed that in practice the two processes are combined. There are 3 figures and 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 20, 1960

Fig. 1. Ozone concentration versus u/V for ozonizer with 0.5 mm discharge space. (1) 780 mm Hg; (2) 620 mm Hg; (3) 440 mm Hg; (4) 320 mm Hg; (5) 160 mm Hg.

Legend: Ordinate O_3 , % by volume.



Card 2/2

VENDILO, G.G.

Afterripening of the green fruits of tomatoes. Vest. Mosk
un. Ser. 6: Biol., pochv. 19 no. 2: 52-57 Mr.-Ap '64. (MIRA 17:9)

1. Kafedra agrokhimii Moskovskogo universiteta.

VENDILO, G.G.

Effect of soil properties and fertilizers on the changes in the
quality of potatoes. Nauch.dokl.vys.shkoly; biol.nauki no.4:147-
150 '62. (MIRA 15:10)

1. Rekomendovana kafedroy agrokhimii Moskovskogo gosudarstvennogo
universiteta im. Lomonosova.
(POTATOES—FERTILIZERS AND MANURES)
(CROPS AND SOILS)

VENDILO, G.G.

Changes in the quantity and quality of tomato fruit depending
on soils and fertilizers. Vest. Mosk. un. Ser. 6: Biol., pochv.
16 no.2:44-54 Mr-Apr '61. (MIRA 14:5)

1. Kafedra agrokhimii Moskovskogo gosudarstvennogo universiteta.
(TOMATOES--FERTILIZERS AND MANURES)

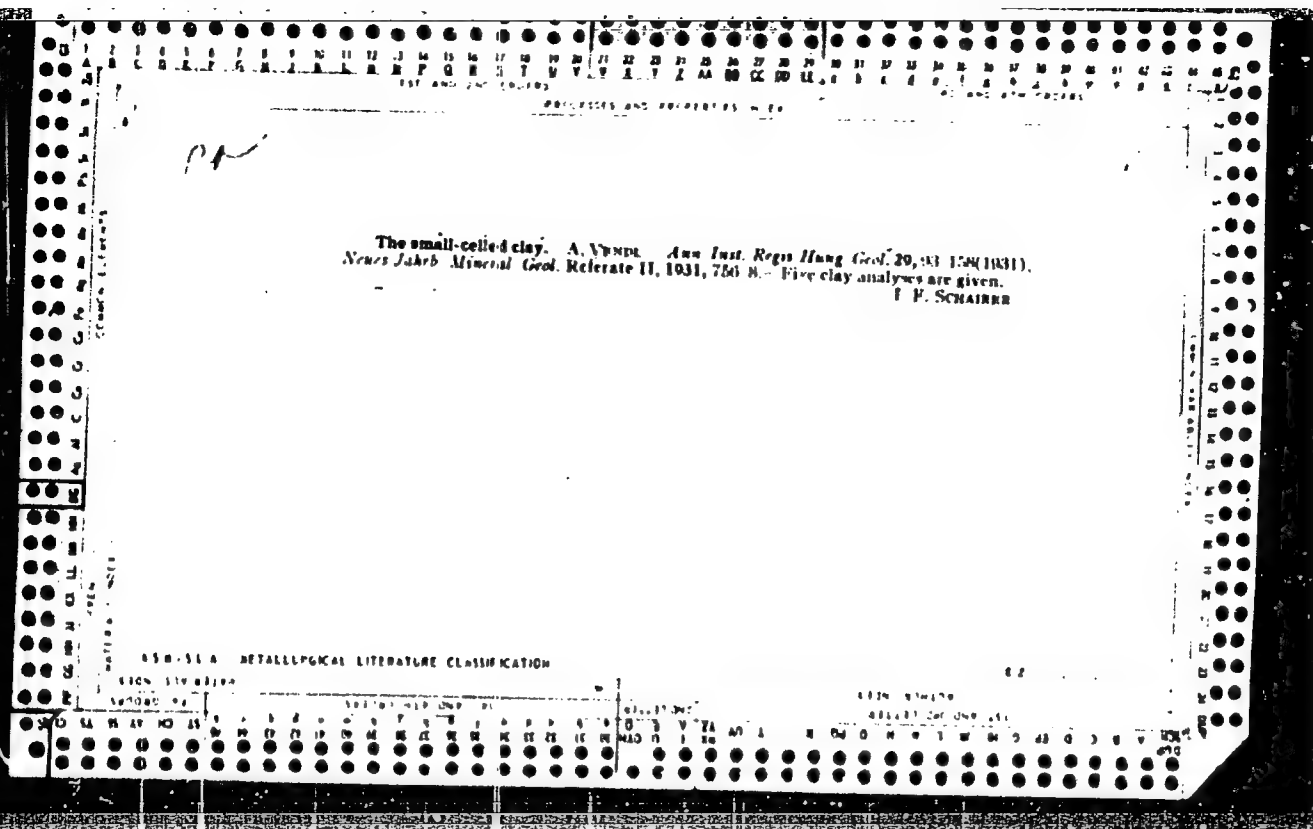
VENDL, A.

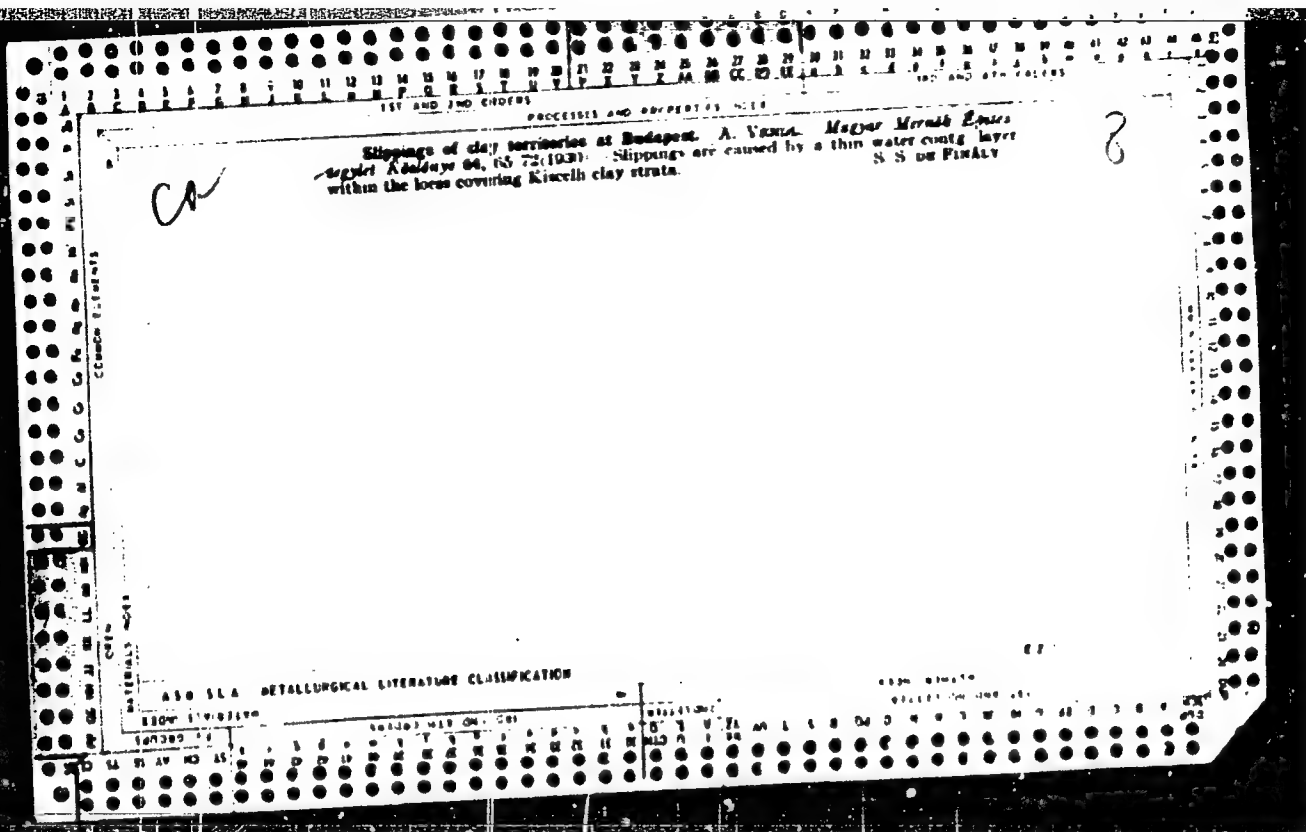
Role of Vizsgai Kozlemenyek in the development of technical sciences in Hungary. p. 369.
VIZSGAI KOZLEMENYEK. HYDROLOGIC PROCEEDINGS, Budapest, Vol. (36) no. 4, 1954
(published 1955).

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

VENDILOVSKIY, Vladimir Stepanovich; FURMAN, Nikolay Abramovich;
POL'SKIY, S., red.; STEFANOVA, N., tekhn. red.

[Manual for television owners] V pomoshch' telezriteliu.
Minsk, Gos. izd-vo BSSR. Red. nauchno-tekhn. lit-ry, 1961. 121 p.
(MIRA 15:2)
(Television--Maintenance and repair)





VENDL, Anna, dr.

New data on the springs situated in the vicinity of the
Danube Bend. Hidrológiai közlöny 44 no.1:43-48 Ja'64.

1. Vizgazdalkodási Tudományos Kutató Intézet, Budapest

Vol 48 No. 2

Vol 48 No. 2

Vol 48 No. 2

are not yet known, and are being held in reserve.
The use of these weapons is being held in reserve.

are not yet known, and are being held in reserve.
The use of these weapons is being held in reserve.

COMMON ELEMENTS		PROCESSES AND PROPERTIES INDEX																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
1ST AND 2ND ORDERS		3RD AND 4TH ORDERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Ca.		8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
<p>The weathering of andesite from Caddiberge, Hungary A. Jendl and T. Farkas. <i>Mineralog. petrogr. Mitt.</i> 44, 437-62 (1963). - The easily weathered components of rocks given detail, and the first products of weathering studied microscopically. Analyses of the original rocks and at stages in weathering are given. The action of concentrated HCl, dil. HCl, distd. H₂O, 6% carbamide soln. and water satd. with CO₂ at 2 atm. was studied. J. F. S.</p>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p> <table border="1"> <thead> <tr> <th>SECTION</th> <th>SUBSECTION</th> <th>1ST ORDER</th> <th>2ND ORDER</th> <th>3RD ORDER</th> <th>4TH ORDER</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> <tr> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> </tr> <tr> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>7</td> <td>7</td> <td>7</td> <td>7</td> <td>7</td> <td>7</td> </tr> <tr> <td>8</td> <td>8</td> <td>8</td> <td>8</td> <td>8</td> <td>8</td> </tr> <tr> <td>9</td> <td>9</td> <td>9</td> <td>9</td> <td>9</td> <td>9</td> </tr> <tr> <td>10</td> <td>10</td> <td>10</td> <td>10</td> <td>10</td> <td>10</td> </tr> <tr> <td>11</td> <td>11</td> <td>11</td> <td>11</td> <td>11</td> <td>11</td> </tr> <tr> <td>12</td> <td>12</td> <td>12</td> <td>12</td> <td>12</td> <td>12</td> </tr> <tr> <td>13</td> <td>13</td> <td>13</td> <td>13</td> <td>13</td> <td>13</td> </tr> <tr> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> </tr> <tr> <td>15</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> </tr> <tr> <td>16</td> <td>16</td> <td>16</td> <td>16</td> <td>16</td> <td>16</td> </tr> <tr> <td>17</td> <td>17</td> <td>17</td> <td>17</td> <td>17</td> <td>17</td> </tr> <tr> <td>18</td> <td>18</td> <td>18</td> <td>18</td> <td>18</td> <td>18</td> </tr> <tr> <td>19</td> <td>19</td> <td>19</td> <td>19</td> <td>19</td> <td>19</td> </tr> <tr> <td>20</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>21</td> <td>21</td> <td>21</td> <td>21</td> <td>21</td> <td>21</td> </tr> <tr> <td>22</td> <td>22</td> <td>22</td> <td>22</td> <td>22</td> <td>22</td> </tr> <tr> <td>23</td> <td>23</td> <td>23</td> <td>23</td> <td>23</td> <td>23</td> </tr> <tr> <td>24</td> <td>24</td> <td>24</td> <td>24</td> <td>24</td> <td>24</td> </tr> <tr> <td>25</td> <td>25</td> <td>25</td> <td>25</td> <td>25</td> <td>25</td> </tr> <tr> <td>26</td> <td>26</td> <td>26</td> <td>26</td> <td>26</td> <td>26</td> </tr> <tr> <td>27</td> <td>27</td> <td>27</td> <td>27</td> <td>27</td> <td>27</td> </tr> <tr> <td>28</td> <td>28</td> <td>28</td> <td>28</td> <td>28</td> <td>28</td> </tr> <tr> <td>29</td> <td>29</td> <td>29</td> <td>29</td> <td>29</td> <td>29</td> </tr> <tr> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> </tr> <tr> <td>31</td> <td>31</td> <td>31</td> <td>31</td> <td>31</td> <td>31</td> </tr> <tr> <td>32</td> <td>32</td> <td>32</td> <td>32</td> <td>32</td> <td>32</td> </tr> <tr> <td>33</td> <td>33</td> <td>33</td> <td>33</td> <td>33</td> <td>33</td> </tr> <tr> <td>34</td> <td>34</td> <td>34</td> <td>34</td> <td>34</td> <td>34</td> </tr> <tr> <td>35</td> <td>35</td> <td>35</td> <td>35</td> <td>35</td> <td>35</td> </tr> <tr> <td>36</td> <td>36</td> <td>36</td> <td>36</td> <td>36</td> <td>36</td> </tr> <tr> <td>37</td> <td>37</td> <td>37</td> <td>37</td> <td>37</td> <td>37</td> </tr> <tr> <td>38</td> <td>38</td> <td>38</td> <td>38</td> <td>38</td> <td>38</td> </tr> <tr> <td>39</td> <td>39</td> <td>39</td> <td>39</td> <td>39</td> <td>39</td> </tr> <tr> <td>40</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> </tr> <tr> <td>41</td> <td>41</td> <td>41</td> <td>41</td> <td>41</td> <td>41</td> </tr> <tr> <td>42</td> <td>42</td> <td>42</td> <td>42</td> <td>42</td> <td>42</td> </tr> <tr> <td>43</td> <td>43</td> <td>43</td> <td>43</td> <td>43</td> <td>43</td> </tr> <tr> <td>44</td> <td>44</td> <td>44</td> <td>44</td> <td>44</td> <td>44</td> </tr> <tr> <td>45</td> <td>45</td> <td>45</td> <td>45</td> <td>45</td> <td>45</td> </tr> <tr> <td>46</td> <td>46</td> <td>46</td> <td>46</td> <td>46</td> <td>46</td> </tr> <tr> <td>47</td> <td>47</td> <td>47</td> <td>47</td> <td>47</td> <td>47</td> </tr> <tr> <td>48</td> <td>48</td> <td>48</td> <td>48</td> <td>48</td> <td>48</td> </tr> <tr> <td>49</td> <td>49</td> <td>49</td> <td>49</td> <td>49</td> <td>49</td> </tr> <tr> <td>50</td> <td>50</td> <td>50</td> <td>50</td> <td>50</td> <td>50</td> </tr> <tr> <td>51</td> <td>51</td> <td>51</td> <td>51</td> <td>51</td> <td>51</td> </tr> <tr> <td>52</td> <td>52</td> <td>52</td> <td>52</td> <td>52</td> <td>52</td> </tr> <tr> <td>53</td> <td>53</td> <td>53</td> <td>53</td> <td>53</td> <td>53</td> </tr> <tr> <td>54</td> <td>54</td> <td>54</td> <td>54</td> <td>54</td> <td>54</td> </tr> <tr> <td>55</td> <td>55</td> <td>55</td> <td>55</td> <td>55</td> <td>55</td> </tr> <tr> <td>56</td> <td>56</td> <td>56</td> <td>56</td> <td>56</td> <td>56</td> </tr> <tr> <td>57</td> <td>57</td> <td>57</td> <td>57</td> <td>57</td> <td>57</td> </tr> <tr> <td>58</td> <td>58</td> <td>58</td> <td>58</td> <td>58</td> <td>58</td> </tr> <tr> <td>59</td> <td>59</td> <td>59</td> <td>59</td> <td>59</td> <td>59</td> </tr> <tr> <td>60</td> <td>60</td> <td>60</td> <td>60</td> <td>60</td> <td>60</td> </tr> <tr> <td>61</td> <td>61</td> <td>61</td> <td>61</td> <td>61</td> <td>61</td> </tr> <tr> <td>62</td> <td>62</td> <td>62</td> <td>62</td> <td>62</td> <td>62</td> </tr> <tr> <td>63</td> <td>63</td> <td>63</td> <td>63</td> <td>63</td> <td>63</td> </tr> <tr> <td>64</td> <td>64</td> <td>64</td> <td>64</td> <td>64</td> <td>64</td> </tr> <tr> <td>65</td> <td>65</td> <td>65</td> <td>65</td> <td>65</td> <td>65</td> </tr> <tr> <td>66</td> <td>66</td> <td>66</td> <td>66</td> <td>66</td> <td>66</td> </tr> <tr> <td>67</td> <td>67</td> <td>67</td> <td>67</td> <td>67</td> <td>67</td> </tr> <tr> <td>68</td> <td>68</td> <td>68</td> <td>68</td> <td>68</td> <td>68</td> </tr> <tr> <td>69</td> <td>69</td> <td>69</td> <td>69</td> <td>69</td> <td>69</td> </tr> <tr> <td>70</td> <td>70</td> <td>70</td> <td>70</td> <td>70</td> <td>70</td> </tr> <tr> <td>71</td> <td>71</td> <td>71</td> <td>71</td> <td>71</td> <td>71</td> </tr> <tr> <td>72</td> <td>72</td> <td>72</td> <td>72</td> <td>72</td> <td>72</td> </tr> <tr> <td>73</td> <td>73</td> <td>73</td> <td>73</td> <td>73</td> <td>73</td> </tr> <tr> <td>74</td> <td>74</td> <td>74</td> <td>74</td> <td>74</td> <td>74</td> </tr> <tr> <td>75</td> <td>75</td> <td>75</td> <td>75</td> <td>75</td> <td>75</td> </tr> <tr> <td>76</td> <td>76</td> <td>76</td> <td>76</td> <td>76</td> <td>76</td> </tr> <tr> <td>77</td> <td>77</td> <td>77</td> <td>77</td> <td>77</td> <td>77</td> </tr> <tr> <td>78</td> <td>78</td> <td>78</td> <td>78</td> <td>78</td> <td>78</td> </tr> <tr> <td>79</td> <td>79</td> <td>79</td> <td>79</td> <td>79</td> <td>79</td> </tr> <tr> <td>80</td> <td>80</td> <td>80</td> <td>80</td> <td>80</td> <td>80</td> </tr> <tr> <td>81</td> <td>81</td> <td>81</td> <td>81</td> <td>81</td> <td>81</td> </tr> <tr> <td>82</td> <td>82</td> <td>82</td> <td>82</td> <td>82</td> <td>82</td> </tr> <tr> <td>83</td> <td>83</td> <td>83</td> <td>83</td> <td>83</td> <td>83</td> </tr> <tr> <td>84</td> <td>84</td> <td>84</td> <td>84</td> <td>84</td> <td>84</td> </tr> <tr> <td>85</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> </tr> <tr> <td>86</td> <td>86</td> <td>86</td> <td>86</td> <td>86</td> <td>86</td> </tr> <tr> <td>87</td> <td>87</td> <td>87</td> <td>87</td> <td>87</td> <td>87</td> </tr> <tr> <td>88</td> <td>88</td> <td>88</td> <td>88</td> <td>88</td> <td>88</td> </tr> <tr> <td>89</td> <td>89</td> <td>89</td> <td>89</td> <td>89</td> <td>89</td> </tr> <tr> <td>90</td> <td>90</td> <td>90</td> <td>90</td> <td>90</td> <td>90</td> </tr> <tr> <td>91</td> <td>91</td> <td>91</td> <td>91</td> <td>91</td> <td>91</td> </tr> <tr> <td>92</td> <td>92</td> <td>92</td> <td>92</td> <td>92</td> <td>92</td> </tr> <tr> <td>93</td> <td>93</td> <td>93</td> <td>93</td> <td>93</td> <td>93</td> </tr> <tr> <td>94</td> <td>94</td> <td>94</td> <td>94</td> <td>94</td> <td>94</td> </tr> <tr> <td>95</td> <td>95</td> <td>95</td> <td>95</td> <td>95</td> <td>95</td> </tr> <tr> <td>96</td> <td>96</td> <td>96</td> <td>96</td> <td>96</td> <td>96</td> </tr> <tr> <td>97</td> <td>97</td> <td>97</td> <td>97</td> <td>97</td> <td>97</td> </tr> <tr> <td>98</td> <td>98</td> <td>98</td> <td>98</td> <td>98</td> <td>98</td> </tr> <tr> <td>99</td> <td>99</td> <td>99</td> <td>99</td> <td>99</td> <td>99</td> </tr> <tr> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> </tr> </tbody> </table>				SECTION	SUBSECTION	1ST ORDER	2ND ORDER	3RD ORDER	4TH ORDER	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	12	12	12	12	12	12	13	13	13	13	13	13	14	14	14	14	14	14	15	15	15	15	15	15	16	16	16	16	16	16	17	17	17	17	17	17	18	18	18	18	18	18	19	19	19	19	19	19	20	20	20	20	20	20	21	21	21	21	21	21	22	22	22	22	22	22	23	23	23	23	23	23	24	24	24	24	24	24	25	25	25	25	25	25	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	28	28	28	29	29	29	29	29	29	30	30	30	30	30	30	31	31	31	31	31	31	32	32	32	32	32	32	33	33	33	33	33	33	34	34	34	34	34	34	35	35	35	35	35	35	36	36	36	36	36	36	37	37	37	37	37	37	38	38	38	38	38	38	39	39	39	39	39	39	40	40	40	40	40	40	41	41	41	41	41	41	42	42	42	42	42	42	43	43	43	43	43	43	44	44	44	44	44	44	45	45	45	45	45	45	46	46	46	46	46	46	47	47	47	47	47	47	48	48	48	48	48	48	49	49	49	49	49	49	50	50	50	50	50	50	51	51	51	51	51	51	52	52	52	52	52	52	53	53	53	53	53	53	54	54	54	54	54	54	55	55	55	55	55	55	56	56	56	56	56	56	57	57	57	57	57	57	58	58	58	58	58	58	59	59	59	59	59	59	60	60	60	60	60	60	61	61	61	61	61	61	62	62	62	62	62	62	63	63	63	63	63	63	64	64	64	64	64	64	65	65	65	65	65	65	66	66	66	66	66	66	67	67	67	67	67	67	68	68	68	68	68	68	69	69	69	69	69	69	70	70	70	70	70	70	71	71	71	71	71	71	72	72	72	72	72	72	73	73	73	73	73	73	74	74	74	74	74	74	75	75	75	75	75	75	76	76	76	76	76	76	77	77	77	77	77	77	78	78	78	78	78	78	79	79	79	79	79	79	80	80	80	80	80	80	81	81	81	81	81	81	82	82	82	82	82	82	83	83	83	83	83	83	84	84	84	84	84	84	85	85	85	85	85	85	86	86	86	86	86	86	87	87	87	87	87	87	88	88	88	88	88	88	89	89	89	89	89	89	90	90	90	90	90	90	91	91	91	91	91	91	92	92	92	92	92	92	93	93	93	93	93	93	94	94	94	94	94	94	95	95	95	95	95	95	96	96	96	96	96	96	97	97	97	97	97	97	98	98	98	98	98	98	99	99	99	99	99	99	100	100	100	100	100	100
SECTION	SUBSECTION	1ST ORDER	2ND ORDER	3RD ORDER	4TH ORDER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2	2	2	2	2	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
3	3	3	3	3	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
4	4	4	4	4	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
5	5	5	5	5	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
6	6	6	6	6	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
8	8	8	8	8	8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
9	9	9	9	9	9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
10	10	10	10	10	10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
11	11	11	11	11	11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
12	12	12	12	12	12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
13	13	13	13	13	13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
14	14	14	14	14	14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
15	15	15	15	15	15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
16	16	16	16	16	16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
17	17	17	17	17	17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
18	18	18	18	18	18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
19	19	19	19	19	19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
20	20	20	20	20	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
21	21	21	21	21	21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
22	22	22	22	22	22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
23	23	23	23	23	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
24	24	24	24	24	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
25	25	25	25	25	25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
26	26	26	26	26	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
27	27	27	27	27	27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
28	28	28	28	28	28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
29	29	29	29	29	29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
30	30	30	30	30	30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
31	31	31	31	31	31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
32	32	32	32	32	32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
33	33	33	33	33	33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
34	34	34	34	34	34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
35	35	35	35	35	35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
36	36	36	36	36	36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
37	37	37	37	37	37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
38	38	38	38	38	38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
39	39	39	39	39	39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
40	40	40	40	40	40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
41	41	41	41	41	41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
42	42	42	42	42	42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
43	43	43	43	43	43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
44	44	44	44	44	44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
45	45	45	45	45	45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
46	46	46	46	46	46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
47	47	47	47	47	47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
48	48	48	48	48	48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
49	49	49	49	49	49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
50	50	50	50	50	50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
51	51	51	51	51	51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
52	52	52	52	52	52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
53	53	53	53	53	53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
54	54	54	54	54	54																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
55	55	55	55	55	55																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
56	56	56	56	56	56																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
57	57	57	57	57	57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
58	58	58	58	58	58																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
59	59	59	59	59	59																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
60	60	60	60	60	60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
61	61	61	61	61	61																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
62	62	62	62	62	62																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
63	63	63	63	63	63																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
64	64	64	64	64	64																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
65	65	65	65	65	65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
66	66	66	66	66	66																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
67	67	67	67	67	67																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
68	68	68	68	68	68																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
69	69	69	69	69	69																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
70	70	70	70	70	70																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
71	71	71	71	71	71																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
72	72	72	72	72	72																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
73	73	73	73	73	73																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
74	74	74	74	74	74																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
75	75	75	75	75	75																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
76	76	76	76	76	76																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
77	77	77	77	77	77																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
78	78	78	78	78	78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
79	79	79	79	79	79																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
80	80	80	80	80	80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
81	81	81	81	81	81																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
82	82	82	82	82	82																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
83	83	83	83	83	83																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
84	84	84	84	84	84																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
85	85	85	85	85	85																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
86	86	86	86	86	86																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
87	87	87	87	87	87																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
88	88	88	88	88	88																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
89	89	89	89	89	89																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
90	90	90	90	90	90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
91	91	91	91	91	91																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
92	92	92	92	92	92																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
93	93	93	93	93	93																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
94	94	94	94	94	94																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
95	95	95	95	95	95																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
96	96	96	96	96	96																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
97	97	97	97	97	97																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
98	98	98	98	98	98																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
99	99	99	99	99	99																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
100	100	100	100	100	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

[illegible]

BC

Pyroxene-andesites from the Quersitz Mts., Hungary. A. V. F. (Dok. Min. Petr. Mitt., 1932, 42, 62-66). Petrographical descriptions with chemical analysis of various types of andesites are given. These rocks indicate a Pacific type of differentiation of the magma. L. J. B.

ASB-1.8 METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840

1ST AND 2ND PAGES

RECEIVED AND RECORDED INDEX

CA 8

Weathering of Kiscoll clay. ALADAR VONDI. *Math. naturw. Aus. ungar. Akad. Wiss.* 48, 247-55 (1931).--Pyrite contained in the bluish gray variety of clay is oxidized to limonite, which gives a yellow color. During the process, silicates, e.g., kaolinite, chlorite and feldspar, are also weathered. This is shown by the ratios of Fe^{++} to Fe^{+++} . The mol. ratio FeO/Fe_2O_3 in the blue clay is 0.57-2.30, in the yellow 0.11-0.21. The ratio S/SO_3 is 0.62-8.37 and 0.27-2.23, resp. The ratios according to MacCarthy are 0.258-1.033% $FeO/\% Fe_2O_3$ in the blue clays and 0.049-0.103 in the yellow ones; this accords with his theory. The mech. compn. of samples varied greatly. The quantity of colloidal particles increased during oxidizing weathering. S. S. on F.

ASA SLA METALLURGICAL LITERATURE CLASSIFICATION

12

VENDL, ALADAR

A százéves Magyarhoni Földtani Társulat története
Budapest, Hungary. Tankönyvkiadó, 1958. 276 p.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

CA

14

Hydrogeology of the bitter-water wells of Budapest.
 Aladár Verh. *Hydrog. Közlem.* 29, 10-20, 78-80 (1949). --
 The wells are located on a shallow field south and south-
 west of Hild Gellert, lying on a Middle Oligocene clay.
 Bitter water is mostly formed in a Kiscelli clay layer which
 contains much colloid. S content of pyrite grains is
 slowly oxidized to sulfates which decomp. the carbonates
 of the rocks or the Ca and Mg hydrocarbonates of the soil
 water, also the easily decomposable silicates; gypsum
 is pptd.; H_2SO_4 also decomps. the alkali feldspars and
 oxidizes the ferrous sulfate. Kiscelli clay layer contains
 more K than Na; but the bitter waters contain more Na
 than K, since muscovite is more resistant to sulfuric acid.

The formation of sulfates requires much O_2 . Freshly dug
 wells contain less sulfate in the first days. The water
 levels of wells is usually highest in the spring and simul-
 taneously the concn. of the bitter water diminishes. The
 surface layers of the wells are usually less concd. than the
 deeper ones. Values of the chief well groups are total
 salt content 29.3375-42.3506 g./l. (including 18.7-27.9 g.
 SO_4^{--}) in the group Erzsébet-szalárda, total salt con-
 tent 35.06-44.24 g. in the group Hunyadi János and 31.04
 g. (including 21.31 g. SO_4^{--}) in the group Ferenc József.
 István Fényes

ca

8

Some loesses of Mount Börzögy. Aladár Vendt.
Math. naturw. Anz. ungar. Akad. Wiss. 53, 181-201
 (1938). -- The same minerals could be detd. as in the loesses
 of the environment of Budapest. The latter contained
 somewhat less basic plagioclase. The high density frac-
 tion of the loesses examd. showed brown amphibole and
 hypersthene as dominant; that of Budapest loesses had
 green amphibole as dominant fraction. The examn
 proved that the characteristic minerals of a territory can
 also be found in the loess formed as a difference from other
 loesses. S. S. de Finály

ASD-510 METALLURGICAL LITERATURE CLASSIFICATION

Ca

Pyroxene andesites of Mount Cserhát. Aladar Venni
Math. naturw. Ans. univ. Akad. Wiss. 49, 301-61
(1932).--Detailed chem. and petrographic description,
with 75 rock analyses and 12 photomicrographs.
S. S. de Buzaly

ATM-SLA METALLURGICAL LITERATURE CLASSIFICATION

VENDL, Aladar, dr.

Selections from the correspondence of Jozsef Szabo. Foldt kozl 90
no.2:230-236 Ap-Je '60. (EEAI 10:2)
(Szabo, Jozsef, geologist)
(Hungary--Geology)

VENDL, A.

Investigation of the disintegration of eruptive rocks; also, remarks by T. Gedeon and others.

p. 201 (Magyar Tudományos Akadémia. Kiszaki Tudományok Osztálya. Közleményei. Vol. 20, no. 3/h, 1957. Budapest, Hungary)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

VENDL, A.; MANDY, T.

VENDL, A.; MANDY, T. Rapid method for determination of pyrite and marcasite.
In German. P. 63.

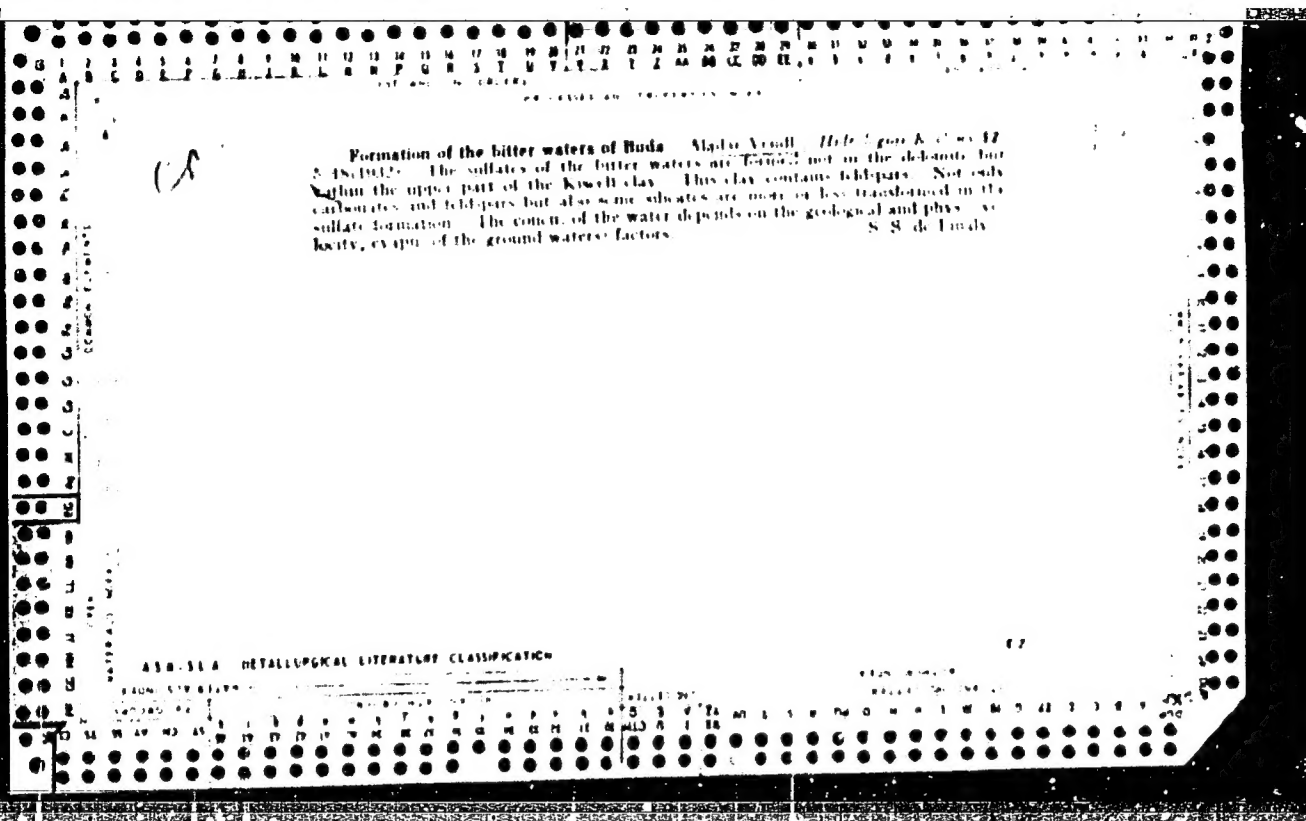
Vol. 8, 1955
ACTA MINERALOGICA PETROGRAPHICA
GEOGRAPHY & GEOLOGY
HUNGARY

So: East European Accessions, Vol. 5, No. 9, Sept. 1956

VENDL, A.

Levice as a source of fluorite, In German, p. 68, ACTA MINERALOGICA
PETROGRAPHICA, (Szegedi Tudományegyetem, Ásvány-Közetani Intézet)
Szeged, Vol. 7, 1953/54

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955



VENDL, Anna, dr.

Data on the springs of the Danube Bend region. Hidrológiai
közlemény 42 no.3:241-245 J1 '62.

1. Vízgazdálkodási Tudományos Kutató Intézet, Budapest.